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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,752	12/19/2001	Yeun-Renn Ting	JCLA8476	9113
23900	7590	01/27/2005	EXAMINER	
J C PATENTS, INC. 4 VENTURE, SUITE 250 IRVINE, CA 92618			ABRAHAM, ESAW T	
			ART UNIT	PAPER NUMBER
			2133	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/033,752

**Applicant(s)**

TING ET AL.

**Examiner**

Esaw T Abraham

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 08/09/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**Final office action**

**Response to the applicant's amendments**

1. Claims 2-4 are cancelled and claim 1 remains pending.
2. Applicants argument/amendments with respect to amended claim 1 filed on 08/09/04 have been fully considered are persuasive. However, upon further consideration, a new ground(s) of rejection is made in view of Berrou (U.S. PN: 5,446,747), Claude Berrou (Near Optimum Error Correcting Coding And Decoding: Turbo Coding, IEEE) and the applicant's admitted prior art (figure 1). The examiner would like to point out that this action is made final.
3. The objection of the record to the title is withdrawn in response to the applicant's amendment.
4. Corrected or substituted drawings were received on 08/09/04. The proposed drawings (marked version) are accepted, however, the disclosure is not amended according to the changes made in the drawings. For example: in page 4 lines 11-15, page 5 line 10 and page 6 lines 4-18 of the disclosure should be amended or maintained according to the drawings.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to

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which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berrou (U.S. PN: 5,446,747) in view of Claude Berrou (Near Optimum Error Correcting Coding And Decoding: Turbo Coding, IEEE) and further in view of the applicant's admitted prior.

As per claim 1, Berrou in figure 1 teaches or discloses a block diagram of a coder comprising a source data element (d) to be coded in a first systematic coding (11) and toward a temporal interleaving module (12) which itself feed a second systematic coding (13) and there are at least two coded data elements  $Y_1$  and  $Y_2$ , coming from the distinct coders (11 and 13), associated with each source data element (see col. 7, lines 47-67). Berrou **does not explicitly** teach that the first and the second systematic coders comply with a formula (see the formula as in claim 1). **However**, Berrou teaches a turbo coder comprising two systematic encoders (see the figure on page 1264 of Berrou's IEEE,) employing the same formula used by the applicant (see the third paragraph on page 1262 of Berrou's IEEE,). **Therefore**, it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to implement the teachings of Berrou (5,446,747) included a formula that comply with the systematic convolution

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encoders as taught by Berrou (see Berrou's IEEE). **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated in order to obtain high coding gains in the encoding system. **Not explicitly described in the prior arts** (Berrou (5,446,747) in view of Berrou (see Berrou's, IEEE)) is parity information corresponding to parameters generated by generators. **However**, figure 1 of the admitted prior art teach parity information  $y_{1k}$  and  $y_{2k}$  corresponding to parameters  $a_{1,k}$  and  $a_{2,k}$ ,  $g_{1,b}$  and  $g_{1,a}$  (see figure 1 of the applicant's admitted prior art) generated by generators within the RSC encoders. **Therefore**, it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to modify the system of Berrou by employing four parameters corresponding to parity information and generated by the generators as taught by figure 1 of the admitted prior art. **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated in order to increase the flexibility of configuration and heighten the decoding efficiency.

### ***Conclusion***

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Esaw Abraham whose telephone number is (571) 272-3812. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are successful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

*Esaw Abraham*  
Esaw Abraham

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*Guy J. Lamarre*  
Primary Examiner